Appl. No. 10/633,136 Response Dated August 14, 2007 Reply to Office Action of May 14, 2007

## **Amendments to the Specification:**

Please add the following new paragraph after paragraph [0016]:

Docket No.: 18098

Examiner: Lu, Jia

TC/A.U. 2611

[0016.1] Figure 7 shows an embodiment of a logic flow.

Please add the following <u>new paragraphs</u> after paragraph [0061]:

[0061.1] Operations for the above embodiments may be further described with reference to the following figures and accompanying examples. Some of the figures may include a logic flow. Although such figures presented herein may include a particular logic flow, it can be appreciated that the logic flow merely provides an example of how the general functionality as described herein can be implemented. Further, the given logic flow does not necessarily have to be executed in the order presented unless otherwise indicated. In addition, the given logic flow may be implemented by a hardware element, a software element executed by a processor, or any combination thereof. The embodiments are not limited in this context.

[0061.2] Figure 7 illustrates one embodiment of a logic flow. Figure 7 illustrates a logic flow 700. Logic flow 700 may be representative of the operations executed by one or more embodiments described herein. As shown in logic flow 700, a discrete transfer function for a processing system is determined at 702. A target transfer function is determined at 704 such that said target transfer function multiplied by the inverse of said discrete transfer function produces a discrete pre-emphasis transfer function. At 706 any unstable poles and/or zeros in said pre-emphasis transfer function are transformed to stable poles and/or zeros. In various embodiments said target transfer function represents a low pass FIR filter having a gain of about unity across substantially all of the frequency range of said FIR filter, and said target transfer function to emphasize a portion of an electromagnetic signal prior to being processed in a processing system.